

** ONE PIECE -Wire Connector WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.

Bridge Deck

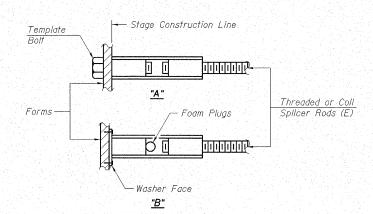
4'-0'

Reinforcement

Bars

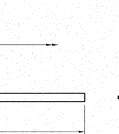
Threaded or Coil

Loop Couplers (E)



INSTALLATION AND SETTING METHODS

"A": Set bar splicer assembly by means of a template bolt. "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms. (E): Indicates epoxy coating.



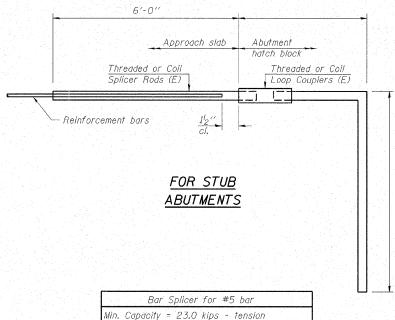
Approach Slab

Threaded or Coil

Splicer Rods (E)

FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar Min. Capacity = 23.0 kips - tension Min. Pull-out Strength = 12.3 kips - tension



Min. Pull-out Strength = 12.3 kips - tension

lo. Required =

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.

Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

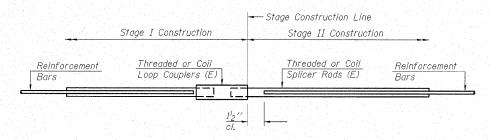
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

Minimum Capacity = $1.25 \times fy \times A_t$

Minimum *Pull-out Strength = $0.66 \times fy \times A_t$

Where fy = Yield strength of lapped reinforcement bars in ksi. A; = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES				
		Strength Requirements		
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length		Min, Pull-Out Strength kips - tension	
#4	1'-8''	14.7	7.9	
#5	2'-0"	23.0	12.3	
#6	2'-7''	33.1	17.4	
#7	3'-5"	45.1	23.8	
#8	4'-6''	58.9	31.3	
#9	5′-9′′	75.0	39.6	
#10	7′-3′′	95.0	50.3	
#11	9'-0''	117.4	61.8	



STANDARD

Bar Size	No. Assemblies Required	Location
#7	10	W. Abut.
#7	10	E. Abut.
#8	10	Pier 1
#8	10	Pier 2

HAMPTON, LENZINI & RENWICK, INC.

CIVIL & STRUCTURAL ENGINEERS
LAND SURVEYORS

HER

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ELGIN . SPRINGFIELD PROJECT NUMBER: 12-33-0004-1 DATE: 11/07/07 DESIGNED: R.J.P. CHECKED: S.W.M. DRAWN: D.A.B.

BAR SPLICER ASSEMBLY DETAILS F.A.S. 1706 / C.H. 6 OVER LAKE SARA

> SECTION 00-00080-00-BR EFFINGHAM COUNTY

STRUCTURE NO. 025-3222 / STATION 10-00